



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,158	05/10/2001	Atsushi Yamaguchi	109500	5938

25944 7590 05/20/2003

OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

RENNER, CRAIG A

ART UNIT	PAPER NUMBER
----------	--------------

2652

DATE MAILED: 05/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/853,158

Applicant(s)

Yamaguchi et al.

Examiner

Craig A. Renner

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8 May 2003
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above, claim(s) 6-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2001 is/are ☒ accepted or ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: ☐ approved ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

Art Unit: 2652

Election/Restriction

1. Applicant's election with traverse of "Group I, claims 1-5" in Paper No. 7, filed 8 May 2003, is acknowledged. The traversal is on the ground(s) that "the subject matter of all pending claims is sufficiently related that a thorough search for the subject matter of any one Group of claims would encompass a search for the subject matter of the remaining claims. Thus, it is respectfully submitted that the search and examination of the entire application could be made without serious burden." This argument, however, is not found to be persuasive because the search for the invention of group I is not coextensive with the search for the invention of group II as evidenced by their different classifications, detailed in paragraph 1 of the Office action filed 28 April 2003. Therefore, searching for both groups could not be made without serious burden.

The requirement is still deemed proper and is therefore made FINAL. Accordingly, claims 6-11 are withdrawn from further consideration pursuant to 37 C.F.R. § 1.142(b) as being drawn to one or more non-elected inventions/species, there being no allowable generic or linking claim.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

Art Unit: 2652

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 U.S.C. § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

6. Claims 1-5 are rejected under 35 U.S.C. § 102(e) as being anticipated by Koike et al. (US 6,292,334).

Art Unit: 2652

Koike teaches a thin-film magnetic head comprising a medium facing surface (as shown in FIG. 1, for instance) that faces toward a recording medium; a read head including a magnetoresistive element (22) and a first shield layer (31) and a second shield layer (33) for shielding the magnetoresistive element, the first and second shield layers having portions that are located in regions on a side of the medium facing surface and opposed to each other (as shown in FIG. 1, for instance), the magnetoresistive element being placed between the portions of the shield layers (as shown in FIG. 1, for instance); and a write head including a first magnetic layer (29) and a second magnetic layer (35) that are magnetically coupled to each other and include magnetic pole portions opposed to each other and placed in regions on a side of the medium facing surface (as shown in FIG. 1, for instance), each of the magnetic layers including at least one layer (as shown in FIG. 1, for instance); a gap layer (27) provided between the pole portions of the first and second magnetic layers; and a thin-film coil (28) at least part of which is placed between the first and second magnetic layers (lines 30-42 in column 7, for instance), the at least part of the coil being insulated from the first and second magnetic layers (lines 30-42 in column 7, for instance); wherein the read head and the write head are placed such that one of the shield layers of the read head and one of the magnetic layers of the write head are opposed to each other (as shown in FIG. 1, for instance); the thin-film magnetic head further comprising a magnetism intercepting layer (34) made of a nonmagnetic metal material that is capable of being formed through plating (lines 5-9 in column 14, for instance, i.e., "Pt", for instance, is capable of being formed through plating) [as per claim 1]; wherein the nonmagnetic metal material has a Vickers

Art Unit: 2652

hardness of 400 or greater (lines 5-9 in column 14, for instance, i.e., "Pt" has a Vickers hardness of 400 or greater, as admitted by applicant in line 7 on page 22 of the present application) [as per claim 2]; wherein the nonmagnetic metal material is made of a single element that is not used for the one of the shield layers and the one of the magnetic layers (lines 48-52 in column 13 taken in conjunction with lines 5-9 in column 14, for instance) [as per claim 3]; wherein the nonmagnetic metal material is platinum (lines 5-9 in column 14, for instance) [as per claim 4]; and wherein the magnetism intercepting layer has a thickness of 0.05 μm or greater (lines 29-31 in column 14, for instance) [as per claim 5].

Claim Rejections - 35 U.S.C. § 103

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(e), (f) or (g) prior art under 35 U.S.C. § 103(a).

Pertinent Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. This includes Matono et al. (US 5,739,991), Rottmayer et al. (US 6,404,601) and Komaki et al. (US 6,430,009), which each individually teaches a thin-film magnetic head further

Art Unit: 2652

comprising a magnetism intercepting layer formed between a lower pole and an upper shield and made of a nonmagnetic metal material that is capable of being formed through plating.

Conclusion

9. Any inquiry concerning the above referenced application should be directed to the examiner, Craig A. Renner, whose telephone number is (703) 308-0559, and whose facsimile number is (703) 872-9314. The examiner can normally be reached Tuesday through Friday from 7:30 a.m. to 6:00 p.m. E.S.T.



**Craig A. Renner
Primary Examiner
Art Unit 2652**

CAR
May 18, 2003